

Amendments to the Claims:**BEST AVAILABLE COPY**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-65 (canceled)

Add the following Claims 66-76.

Claims

66. (new) A nucleic acid vector comprising:
- (a) a nucleic acid sequence encoding a human Tau protein operably linked to
 - (b) a nucleic acid sequence that directs expression of said human Tau nucleic acid in the nervous system of a mouse;
 - (c) and a targeting sequence wherein said targeting sequence comprises a nucleotide sequence capable of integrating into the endogenous Tau equivalent gene of a mouse, so as to prevent expression of equivalent Tau protein or a related or equivalent protein from said mouse in favour of said human Tau protein.
67. (new) The vector according to claim 66 further comprising a sequence encoding a reporter molecule.
68. (new) The vector according to claim 67 wherein said reporter molecule comprises the hygromycin Pgk-hyg marker gene sequence.
69. (new) The vector according to claim 66 wherein said sequence encoding human Tau is a cDNA sequence.

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70. (new) The vector according to claim 66 wherein the sequence directing expression is the Thy1 promoter.
71. (new) The vector according to claim 66 wherein said targeting sequence comprises a NcoI restriction site corresponding to the unique NcoI restriction site of exon1 of the mouse wild type genome.
72. (new) The vector according to claim 66 further comprising two loxP sites flanking either of the sequences of step (a) and (b).
73. (new) The vector according to claim 66 further comprising a stop sequence capable of preventing expression of said human Tau protein and which sequence is flanked by two loxP sites capable of undergoing reciprocal conservative DNA recombination in the presence of Cre recombinase with the resulting excision of said stop sequence.
74. (new) Isolated *in vitro* mouse cells transformed, transfected or injected with a vector according to claim 66.
75. (new) The cells according to claim 74 which are embryonic cells.
76. (new) The cells according to claim 75 wherein said embryonic cells are embryonic stem cells.

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